

Bring Your Own Data workshops

One of the biggest challenges of data-intensive science is to facilitate knowledge discovery. Life scientists, both in the public and the private domain, produce large amounts of data that are both complex and heterogeneous. They also make use of multiple 'core' data resources like UniProt or ChEMBL. Researchers spend many hours in projects coupling these data sources, struggling to decrypt the data and to transform them into actionable knowledge. Connecting and functionally interlinking datasets is therefore essential for knowledge discovery.

The FAIR Data Unit (FDU) at DTL offers a helping hand in linking data. FDU organises Bring Your Own Data (BYOD) workshops in which experts in modeling data and content experts support data owners to make data **FAIR** using linked data technology. The acronym FAIR for data means that they are Findable, Accessible, Interoperable and Reusable, by humans *and* computers.

To generate value for a research community beyond the initial researchers, funding agencies are increasingly setting requirements for proper data stewardship of research data. Since FAIR data is vital to enable appropriate data stewardship and will be mandated by funding agencies and national governments alike, there will be a definitive need to publish FAIR data for new and legacy data sets. FAIR Data publishing will need to be a service provided by many certified entities across Europe.

We have developed a methodology for making data FAIR via BYOD workshops. A BYOD is a low barrier approach to get data owners acquainted with the possibilities opened up by 'functionally interlinking' data with other relevant datasets and demonstrating the added value of FAIR data for knowledge discovery. It is a lightweight, very effective and also fun way to collaborate across disciplinary and political borders, often yielding eye opening results. It typically is a three day event in which FAIR data are produced and analysed, and hands-on training modules.

Since 2014, we have organised multiple BYODs, supporting organisations and companies (a.o. Human Protein Atlas, Enza Zaden, Rijk Zwaan) and for instance the rare disease community, to produce FAIR data. Over time we developed scripts, working and planning documents, a budget, and training materials for life science researchers and future data experts. Furthermore, we have a pool of FAIR data experts standing by, eager to share their knowledge. From 2016 onwards, BYODs are scheduled for the **ELIXIR EXCELERATE** project, the **Odex4all** project and many other projects.